

CLAIMS

What is claimed is:

1. A method of activating the immune system in a mammal in need thereof, comprising administering to the mammal an effective amount of an IMXP-888 polypeptide.

2. The method of claim 1, wherein the mammal has a condition selected from the group consisting of viral infection, bacterial infection, fungal infection, cancer, and graft v. host disorders.

3. The method of claim 1, wherein the mammal is a human.

4. The method of claim 1, wherein the IMXP-888 polypeptide comprises an amino acid sequence selected from the group consisting of:

- a) a polypeptide having the sequence of residues 18 to 375 of SEQ ID NO:3;
- b) a polypeptide having the sequence of residues 13 to 371 of SEQ ID NO:1;
- c) a polypeptide having the sequence of residues 13 to 280 of SEQ ID NO:2;
- d) a polypeptide encoded by a sequence that is at least 80% homologous to a polynucleotide sequence that encodes residues 18 to 375 of SEQ ID NO:3;
- e) a polypeptide encoded by a sequence that is at least 80% homologous to a polynucleotide sequence that encodes residues 13 to 371 of SEQ ID NO:1; and
- f) a polypeptide encoded by a sequence that is at least 80% homologous to a polynucleotide sequence that encodes residues 13 to 280 of SEQ ID NO:2.

5. The method of claim 4 wherein the amino acid sequence comprises residues 23 to 370 of SEQ ID NO:3.

6. The method of claim 1 or 4, wherein the IMXP-888 polypeptide is glycosylated.

7. The method of claim 1 or 4, wherein the IMXP-888 polypeptide is fused to a heterologous polypeptide.

8. The method of claim 7, wherein the heterologous polypeptide is a constant region derived from an antibody molecule.

9. A method of treating an inflammatory disorder in a mammal, comprising administering an effective amount of an IMXP-888 antagonist to the mammal.

10. The method of claim 9, wherein the IMXP-888 antagonist is an antibody.

11. The method of claim 9, wherein the IMXP-888 antagonist is a ribozyme that specifically cleaves a ribonucleic acid that encodes an IMXP-888 polypeptide.

12. The method of claim 9, wherein the IMXP-888 antagonist is an IMXP-888 binding partner.

13. A method of using an IMXP-888 polypeptide to identify an IMXP-888 receptor, comprising screening an expression library prepared from a cell type that responds to IMXP-888 polypeptide for a clone that encodes a protein which binds to IMXP-888.

14. The method of claim 13 wherein the cell type is a hematopoietic cell.

15. The method of claim 14 wherein the hematopoietic cell is a THP-1 cell, a natural killer cell, a monocyte, or a peripheral blood lymphocyte.

16. The method of claim 13 wherein the screening step entails detecting the binding of a detectably labeled IMXP-888 polypeptide.

17. The method of claim 16 wherein the detectably labeled IMXP-888 polypeptide is a fusion protein comprising soluble IMXP-888 extracellular domain.

18. A method for identifying compounds capable of enhancing or inhibiting a biological activity of an IMXP-888 polypeptide, comprising
contacting a cell which responds to the IMXP-888 polypeptide with a test compound in the presence of the IMXP-888 polypeptide,
assaying a response of the cell to the IMXP-888 polypeptide, and
comparing the response of the cell to a standard level of activity, the standard being assayed when contact is made between the cell and the IMXP-888 polypeptide in the absence of the test compound,
wherein an increase in the response over the standard indicates that the test compound is an agonist of IMXP-888 activity and a decrease in the response compared to the standard indicates that the test compound is an antagonist of IMXP-888 activity.

19. The method of claim 18 wherein the response is assayed by measuring cytokine production from the cell or by measuring calcium mobilization in the cell.

20. The method of claim 19 wherein the cell type is a hematopoietic cell.

21. The method of claim 20 wherein the hematopoietic cell is a THP-1 cell, a natural killer cell, a monocyte, or a peripheral blood lymphocyte.